cedures, the diabetes was handled with a relatively high carbohydrate diet, a daily dose of protamin-insulin and small premeal doses of old insulin to keep the urine relatively sugar-free and at all times acetone-free. There was no attempt made to keep the blood sugars within so-called normal limits. It was seen that each day the equivalent of at least 200 grams of glucose was taken by the patient in four meals or in multiple small feedings during the day and night, even on the day of her operations, any deficit being made up with intravenous glucose. It is felt that in combating infection it is essential that the diabetic as well as the nondiabetic have always available sufficient glucose and insulin for the increased metabolism, and that acidosis must not occur. It is also felt that high blood sugars *per se* do not make for increased hazard of infection or for poor wound healing. But when these complications are seen in diabetics they are due rather to the lack of available combustible glucose, and this may occur if the patient is not given sufficient glucose and insulin, even though the urine is sugar-free and the blood sugars are normal or low.

In a nondiabetic who goes through an operation, intravenous glucose is frequently administered immediately following surgery, and sometimes kept up for two or three days because the surgeon feels that this is necessary to ward off acidosis and other complications. During this period of glucose administration the blood sugar of the nondiabetic varies from normal to 700 milligrams per cent, and the patient continually shows sugar in the urine and yet does well. It is exactly with this in mind that this patient was given practically all the glucose she could take and plenty of insulin, to make sure she was burning her glucose after each operative procedure, with no attempt being made to keep her blood sugars within normal limits or the urine sugar-free.

While at home the diabetes was controlled with a single daily dose of 50 to 60 units of protamin-insulin. On hospitalization for surgery the protamin-insulin was cut to approximately two-thirds this amount, to give a constant supply of insulin without the danger of severe reactions, changing her in a manner from a severe to a mild diabetic. She was then allowed to eat when and as desired, and the carbohydrate intake was carefully measured and the urine repeatedly tested for sugar, small doses of old insulin being given as indicated. Many times during her operative procedures she went to surgery with blood sugars over 200 milligrams per cent, and had blood sugars ranging 200 to 300 milligrams per cent throughout the day following surgery. At no time was it shown that these high blood sugars, in themselves, detracted in any way from the rapidity of her wound healing, nor did she ever vomit or have acidosis.

With the diabetic control favoring healing, reconstructive problems in this case evolved around the location rather than the type of the defect. The tissue loss necessitated restoration of both thin skin for the lid area and thick skin for the nose and cheek. The advantage of the tubed pedicle flap over the lined forehead flap was its adaptability to these conditions, even though texture, color, and thickness were factors in favor of the latter. Bony support was given preference over cartilage because it does not bend, resists infection, and unites readily to the underlying bone. Isografts were not considered.

This case illustrates well again the necessity for close coöperation among specialists when many are caring for one patient. Too often the patient is lost between "specialists."

SUMMARY

1. A case of osteomyelitis of the bones of the face, due to hemolytic streptococcus, in a 14-year-old, severe diabetic, with recovery and plastic reconstruction, is reported.

2. Sulfanilamide may have been an important factor in the localizing of the infection.

3. The conservative management of the bony sequestra in this type of case is emphasized.

4. A relatively high carbohydrate diet with insulin was used in the diabetic management, without particular care to the control of blood sugars.

5. The problem of restoring a bad defect in a difficult area on the face, complicated by the loss of the eye, is briefly discussed.

6. After careful analysis a tubed pedicle was used, in preference to a lined forehead flap, for restoration.

7. Autogenous bone grafts were used for support.

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INFANTILE ECZEMA: ITS DERMATOLOGIC MANAGEMENT*

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THE term "infantile eczema" is a general one, covering a number of different conditions. In recent years there has been agreement, for the most part, as to what is included under this term. For the purpose of this discussion on therapy, the following division is made: eczematous fungus infections; seborrheic dermatitis; contact dermatitis; atopic dermatitis. Frequently two or more of the above are present at the same time.

Correct diagnosis naturally is most important. This does not mean, however, that the treatment then is routine for each type of eczema. Infants with the same kind of eczema will show marked differences in their response to the same medication. A slight modification in the preparation may be all that is necessary to achieve good results. Frequently, a change to some other medication is essential.

GENERAL CONSIDERATIONS

The first problem in treatment nearly always is the parents. They are, of course, upset and it is important to have their coöperation. They should be told several facts concerning the disease. It is

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not contagious except occasionally in the fungus type, and the health of the baby is not generally affected. There is no residual scarring and the skin will return to normal. In regard to prognosis, the infant has a 90 per cent chance of getting over the disease between the eighteenth month and the second year.

Instructions should be given the family concerning the baby's surroundings. The room should be scantily furnished, the closer to bareness the better. Exposure to sunlight and wind should be avoided. Tight-fitting and irritating clothing should be done away with. The clothing and bed clothes should be made of cotton so that the child does not come in contact with any wool. Feathers should be eliminated from the room and the floor should be mopped frequently so that no dust or lint accumulates.

Soap is another irritating substance which should not be used. Baths can be given and it is well to add starch or oatmeal to the water. The one exception for the use of soap is in treatment of the scalp. Here it is of advantage in removing the crusts.

Pruritus is the most distressing symptom, and is present in all forms of eczema. This should be controlled because a short bout of scratching will change a mild dermatitis into a severe one. If the baby is excoriating himself, splinting or tying of the arms is indicated. Small doses of a mild sedative may be needed. Ideally, babies with any marked involvement should be hospitalized, as they respond rapidly to this change in environment. Osborn has clearly demonstrated this point in a large group of patients which did not respond at home to any therapy, but were cured with simple remedies when hospitalized. In any severe case, hospitalization should be urged.

ECZEMATOUS FUNGOUS INFECTION

This form of infantile eczema is not frequently seen. It usually involves the inguinal and gluteal folds. These infections are usually characterized by sharp margination. They are not vesicular, but weeping can be present. The color generally is a deep red. There is usually peripheral exfoliation. The central portion shows maceration of the superficial layers of the epidermis. Fissuring is common along the lines of the folds. The offending organism is easily identified in the scrapings.

These cases usually respond well to treatment. Local therapy consists of a powder or a simple lotion such as calamine lotion, N. F. or a starch lotion. A paste, such as Lassar's in which there is incorporated a 1 or 2 per cent ammoniated mercury, is useful in the drier forms. Gentian violet, 2 per cent in aqueous solution, painted on the areas once or twice a day, is often efficacious in the monlial types of infection.

Prescription I. Mild antiseptic dusting powder

Powdered boric acid, zinc oxid, purified talc., each in sufficient quantity to make 30 grams.
Mix and dispense in sifter-top can.
Label: Use freely as required.

Prescription II. Antipruritic starch lotion

Phenol	0.25 to 1.0 per cent
Liq. Carbonis detergens (Wright's)	5.0 to 10.0 per cent
Zinc oxid	48.0 grams
Starch	48.0 grams
Glycerin	24.0 grams
Liquor aquae calcis	Sufficient to make 240 grams

Particular attention should be paid to the diapers. They should be boiled, and the last rinse should be a mild antiseptic solution, such as boric acid or a very weak solution of bichlorid of mercury. Rubber pants should not be used.

Fungous infections due to the trichophyton group, when occurring on trunk or extremities, usually are well treated with about half or quarter strength Whitfield's ointment. Another excellent remedy for this type of infection is an ointment containing 2 per cent sulphur and 2 per cent salicylic acid in petrolatum.

SEBORRHEIC DERMATITIS

This type occurs on the scalp, cheeks and, less frequently, the axillae and inguinal folds. It is made up of inflammatory patches with a considerable amount of scale, which has a greasy, yellowish appearance. It is most marked on the scalp. This is seen most frequently in babies who are overweight, and reduction in weight is of considerable help in treatment. The first step is to remove the scales. This is done by gently rubbing with gauze soaked in olive oil. This is the one form of eczema in which soap can be used in place of the oil to remove the crusts. After the scale has been removed, the area is dried and an ointment applied. Mild sulphur ointments, 1 to 3 per cent, are the most efficacious and have nearly a specific effect. Preparations having the same percentage of ammoniated mercury are also extremely useful.

CONTACT DERMATITIS

While this is the most common form of eczema in the adult, it does not present a great problem in infants. It should always be considered, however, and definitely ruled out before treatment is started. The eruption may be vesicular and is usually inflammatory and pruritic. There are ordinarily only one or two localized areas involved, and these most frequently occur on exposed surfaces. The first thing after the diagnosis is made is, of course, to remove the cause, as, for example, a dermatitis from a sweater. Wool and feathers, as has been shown by Osborn, are the most frequent cause of this type of eczema. Other substances, which should be excluded from the environment, are silk, kapok, pyrethreum, soap, and mercury in its various forms. Osborn feels that this latter is frequently the cause of hypersensitivity in infants. This develops early from the use of baby oils having mercury as the antiseptic. If the external irritation is found and removed, treatment is simple, as most of these eruptions will involute rapidly. In the weeping and vesicular stage, compresses of a saturated boric acid solution or Burow's solution

(liquor aluminum acetate, diluted 1-8; 1-15) are of value. A soothing lotion, such as calamine, is frequently all that is necessary. A paste, such as Lassar's, with a quarter to a half per cent of phenol for its antipruritic effect, is of value.

ATOPIC DERMATITIS

This is the classical form of infantile eczema. The face and flexor surfaces of the extremities are the sites of predilection. It is characterized by weeping, crusting, lichenification, and extreme pruritus. It is in this form that the diet is of particular importance, as will be brought out by others in this symposium. External irritants, such as feathers and wool, also play an important rôle, as in the contact type. For the weeping and crusting stage, the method of choice is compressing or applying massive wet dressings. Treating large areas is best done in the hospital. A few layers of moist gauze or cotton is not a wet dressing, because the exudate will stick to it and irritate the area and when it dries it does more harm than good. The dressings should be made from unstarched gauze or soft linen, saturated with the solution to be used and wrung out so that it is not dripping. This is placed on the affected areas, and should be at least two inches thick. The dressing is then covered with some sort of impermeable material, such as cellophane, to keep the dressings from drying. A dry bandage or towel is then put on to hold the dressing in place. To put such a dressing on the face requires considerable nursing skill. When improperly applied, a wet dressing is worse than none. Dressings should be changed every three to four hours. A wet dressing can be made with saturated boric acid solution, Burow's solution 1-8, 1-20; potassium permanganate 1-5000 is an excellent solution if any secondary infection is present. After weeping and crusting have subsided, which should be in a few days, ointments are in order.

By far the most useful single remedy is crude coal-tar. One should make sure that eastern crude coal-tar is being used, and details should be given to the pharmacist if he does not know how to make the preparation. It should be smooth and dry. If it is not properly prepared, it crumbles and tends to aggravate the skin. Its proper preparation is with equal parts of crude coal-tar and zinc oxid mixed together. Then starch and petrolatum are mixed. These two mixtures are then worked in together to form a smooth black paste. This is applied gently to the affected areas, if there is any weeping and erythema present. If the areas are lichenified, the ointment should be rubbed in.

Prescription III. Crude coal-tar ointment

Crude coal-tar	4.0 grams
Zinc oxid	4.0 grams
Mix and add	
Starch	30.0 grams
Petrolatum	30.0 grams

Mix and label: Apply to affected areas two or three times a day.

Crude coal-tar can be used in full strength, the liquid being painted on the affected areas every other day. After the affected areas begin to show slight exfoliation, the tar should be stopped, and a simple paste of equal parts of boric acid ointment and Lassar's paste should be used. If the tar is used too long a dermatitis may develop. This is frequently of a follicular type. Another preparation which has been useful in my hands is a 10 per cent ichthyol incorporated in Lassar's paste. This is less irritating than crude coal tar. Naftalan, a mild tar used in 5 to 10 per cent strength, has the same indications as ichthyol.

COMMENT

No attempt has been made to include all the various remedies that are of value in the different types of infantile eczema. One treating these cases should become completely familiar with the medications he is using, so that the changing of only one or two per cent of any one ingredient in the course of the disease will mean involution, and not evolution, of the process. There are a few general statements that may be made:

1. Change of environment (hospitalization) is beneficial.
2. Removal of wool and feathers as common cause of contact reactions should always be done.
3. Dermatitis from local medication should be watched for. Mercury is the worst offender.
4. Weeping areas should be treated with wet dressings or compresses before lotions and ointments are used.
5. On inflamed areas, pastes are better than greasy ointments.
6. Recurrences are frequent, some unexplainable and others due to carelessness in following detailed directions.
7. Always remember that great majority of infants clear around the age of two years.

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EPILEPSY*

A GENERAL SURVEY OF THE CONVULSIVE STATE

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CONVULSIONS occur in a truly bewildering variety of conditions. Paresis, brain tumor, diabetes, alcoholism, brain trauma, hysteria, uremia, and tetanus are but a few of fifty or more organic, toxic and functional disorders associated with convulsive manifestations.

Because of the mystery surroundinng its etiology, the title of idiopathic epilepsy was given to a group of so-called spontaneous seizures; but just as fever and pain are symptoms of an underlying pathology, so should the epilepsies, or convulsive states, be considered.

The finding of neolithic skulls, with trephine openings to allow of the escape of the devils caus-

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